

At Mission Creek

BRIDGE No. 51C-350

City of Santa Barbara Project No. 7661

Federal Aid Project No. BRLS-5007(034)

EA 05-9274421

To be supplemented by Caltrans Standard Plans dated May, 2006, the most current Standard Plans for Public Works Construction (APWV), and the most current City of Santa Barbara Standard Plans and Specifications



Project Site

BENCHMARK: TIDAL 1 - 3 3/8" BRASS DISK STAMPED "USC&GS BM 1 1930", SOUTHERLY SIDE OF CABRILLO BOULEVARD, SET IN EASTERLY POST OF CONCRETE GUARDRAIL OVER MISSION CREEK, 312' NORTHEASTERLY OF THE CENTERLINE OF THE INTERSECTION OF CABRILLO BOULEVARD AND STATE STREET.

ELEVATION: 16.16' NAVD 88

BASIS OF BEARINGS: R/S BOOK 147, PAGES 70 - 74

CHARLES BROWN, SURVEY PARTY CHIEF

805-564-5403


Amendment/Addendum Description

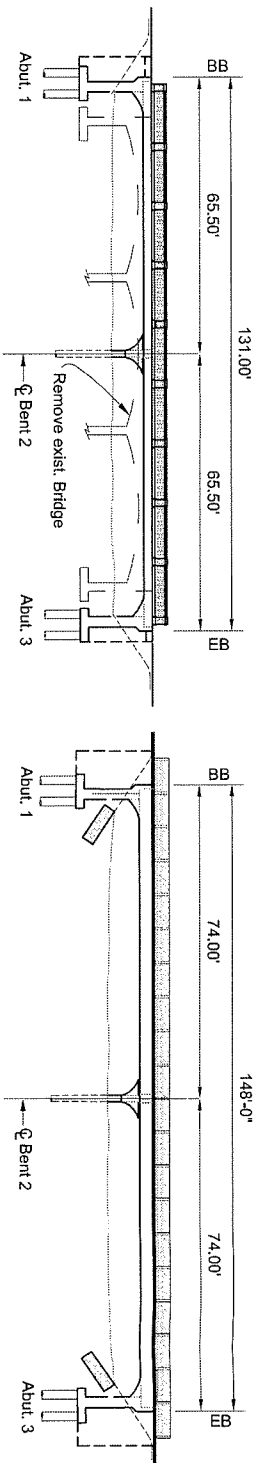
The Cabrillo Boulevard Bridge Reconstruction Project (Project) at Mission Creek was approved by the California Coastal Commission (CCC) on April 9, 2008, to replace the existing, structurally deficient bridge with a new bridge. Since the CCC approval, the Project has been in the Caltrans right of way phase. The Project is anticipated to begin construction in the summer of 2013. The original project proposal included placing a temporary Beachway bridge 70 feet to the south to get people and area utilities away from the construction zone. As a result of the Project's Value Engineering Analysis, significant cost and schedule savings were discovered if the temporary Beachway location could be made permanent. This location is preferred from a circulation safety perspective. Approximately one month of schedule savings, and \$500,000 of cost savings can be achieved during construction if the Beachway portion of the proposed bridge is relocated. Relocating the Beachway would also minimize a current safety issue of separating the Beachway from the bridge's sidewalk. The sidewalk and Beachway currently mix fast moving pedestrians/joggers/bicyclists with slow moving pedestrians. This conflict in use can be addressed as part of the Project and triggers by amending the Project's permits. The City is requesting the following agency approvals to relocate the Cabrillo Beachway approximately 59 feet to the south from its current location:

a. City of Santa Barbara Historic Landmarks Commission and Caltrans review and acceptance of the supplemental Historic Properties Survey Report (HPSR) and Memorandum of Agreement (MOA) MST2004-00878/CDP/2007-2001, Historic Landmarks Commission review and approval of the revised bridge railing.

- b. City of Santa Barbara Planning Commission recommendation of the California Coastal Commission for the amendment of MST2004-008/8/CDP2007-2001/CDP 4-07-134. The Beachway is located in the Coastal Commission's original jurisdiction, the Planning Commission requirement is to only make a recommendation to the Coastal Commission for the Beachway relocation.
- c. Coastal Commission Approval of an immaterial amendment to the existing approval Coastal Development Permit, CDP 4-07-134, for the Caballo Blvd. Bridge Replacement Project.
- d. California Department of Fish and Game approval to amend the approved Streambed Alteration Agreement (1-8-07-F-63).
- e. Army Corps of Engineers approval to amend the approved Nationwide 404 Permit, SP-2006-00379-CLM.
- f. Regional Water Quality Control Board approval to amend the approved 401 Certification, 34208WQ008"

Sheet Index	
Sheet 1 - Title Sheet, Amendment/Addendum Description, Permit, Addendums Requested and Vicinity Map	
Sheet 2 - Approved General Plan	
Sheet 3 - Proposed General Plan	
Sheet 4 - Approved Layout	
Sheet 5 - Proposed Layout	
Sheet 6 - Approved Misc. Barrier Rail Details	
Sheet 7 - Proposed Beachway Elevation and Rail	
Sheet 8 - Approved Turf Replacement Plan	
Sheet 9 - Proposed Turf Replacement Plan	
Sheet 10 - Approved Downstream Planting Plan	
Sheet 11 - Proposed Downstream Planting Plan	

DESIGN	SO	BENGAL ENGINEERING  Cabrillo Boulevard Bridge (Replacement) at Mission Creek PROPOSED TITLE	CITY OF SANTA BARBARA PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION	CITY PROJ. No. 7661 FA No. BRLS-5007(004) SHT 1 OF 11
DRAWN	ETB			
CHECKED				
F.L.D. BY NO.				
PAGE				
DESCRIPTION	DATE	APPROVED		
REVISIONS		Reg. Civil Eng. _____ Approval Date: _____ Original Scale _____ Is In Inches _____		
		Approved: _____ Date _____ City Engineer		
		DWG. NO. C-1-4200		

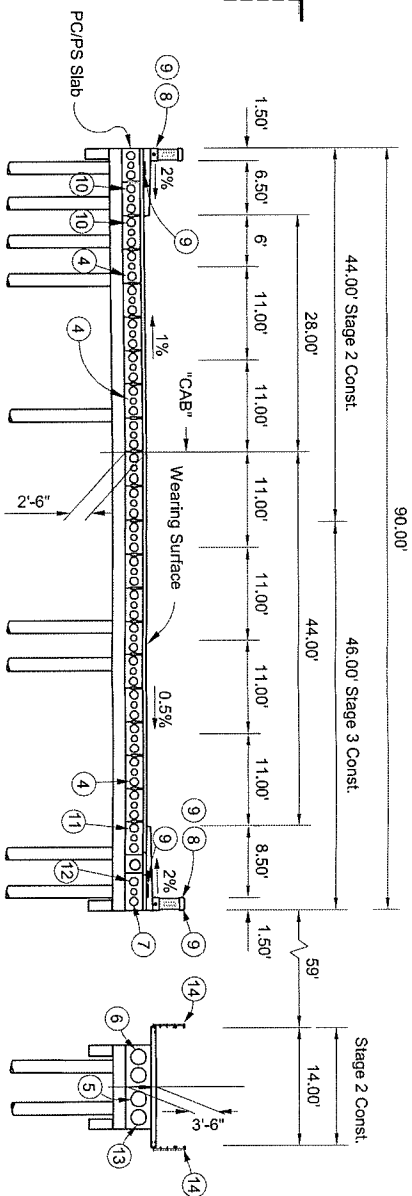


ELEVATION - CABRILLO BLVD BRIDGE

ELEVATION - BEACHWAY BRIDGE

Scale: 1" = 20'

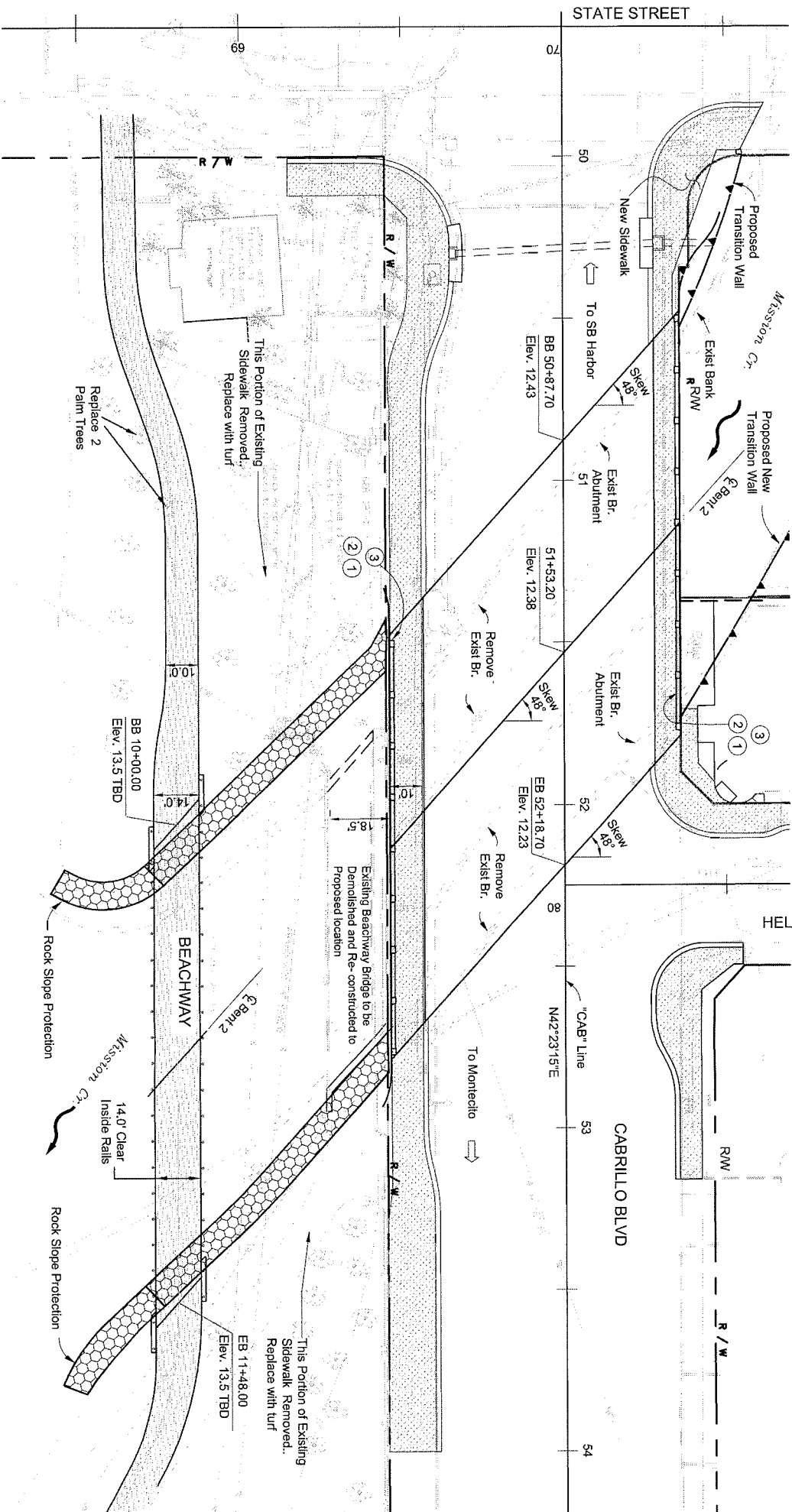
Scale: 1" = 20'



TYPICAL SECTION

Scale: 1" = 10'-0"

- Notes:
- Bridge skew not shown.
 - Upstream barrier rail shown.
 - See barrier rail aesthetic details for railing architecture.
 - See special provisions regarding building at 13 East Cabrillo Blvd.




PLAN

Scale: 1" = 20'

- Notes:
- Not all piles shown.
 - Upstream Transition Walls and Bridge Pile Installation constitutes Stage 1 Construction.
 - Existing Structure and Utilities not shown.
- Cast "B". No. 51C-350" and year completed
 - Cast "Cabrillo Blvd. Bridge"
 - Barrier Rail Aesthetics and Layout, See Civil Plans
 - 4" Ø Future utility opening through PC/PS Slab (Typ.)
 - 14" Ø Recycled Water
 - 16" Ø High Pressure Gas (by others)
 - 8" Ø Water
 - Concrete Barrier
 - Future Utility Opening through sidewalk & barrier rail (Typ.)
 - 4" SCE Conduit
 - 1.4" Ø Verizon
 - 1.3" Ø Cox Cable
 - Future Dredge Line
 - Beachway Bridge Rail, Aesthetic Features to be Determined

Legend

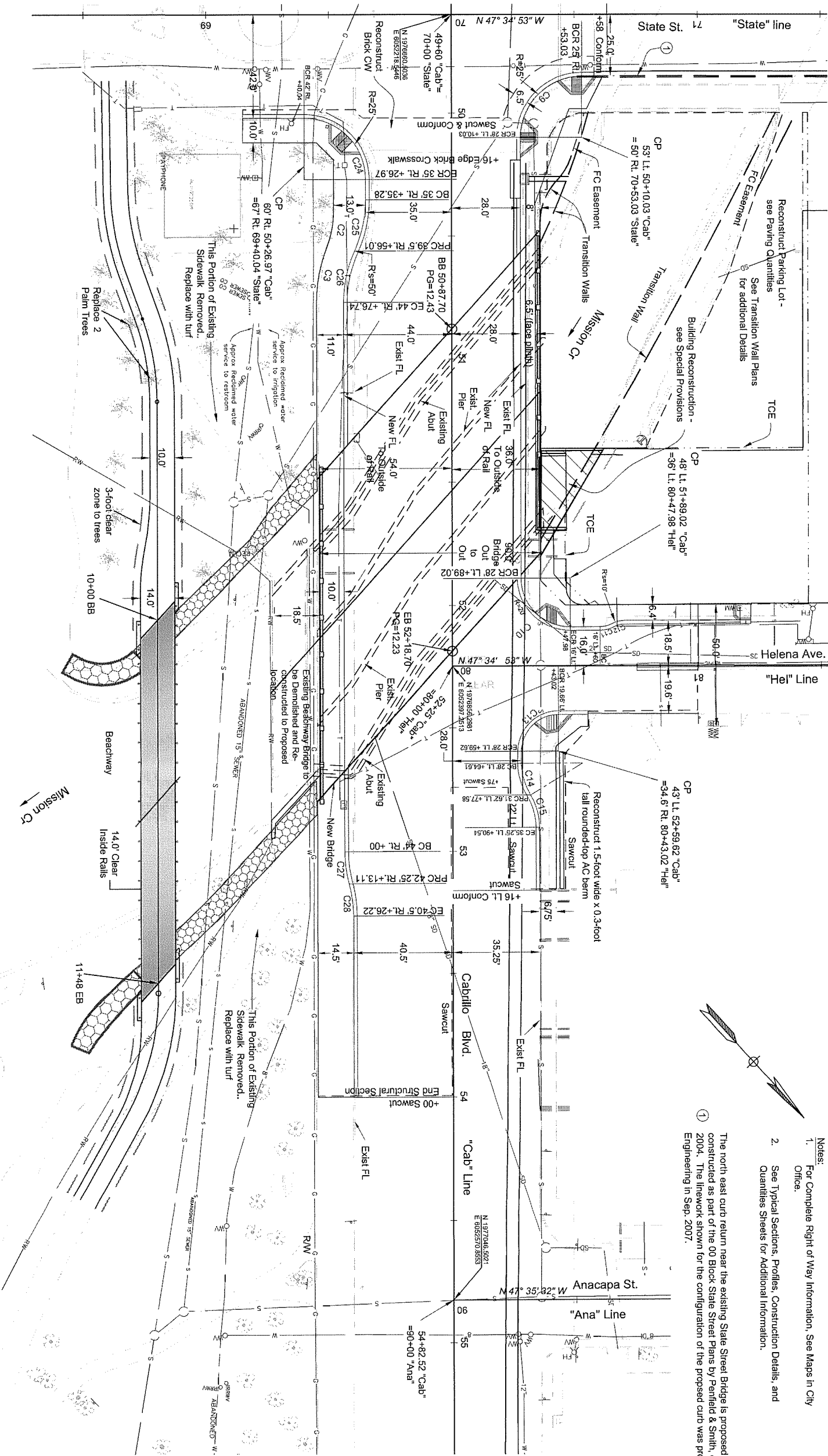
- Sidewalk
- Beachway

		5/28		DESIGN		JW	
				DRAWN		RT	
				CHECKED		SI	
				FLO BR NO.			
				PAGE		ATLAS	
				DESCRIPTION		DATE	
				APPROVED			
				REVISIONS			
							
				BENGAL ENGINEERING			
				250 BIG SUR DRIVE, GOLETA, CA 93117			
				(805) 563-0788			
				Reg. Civil Eng. _____			
				Approval Date: _____			

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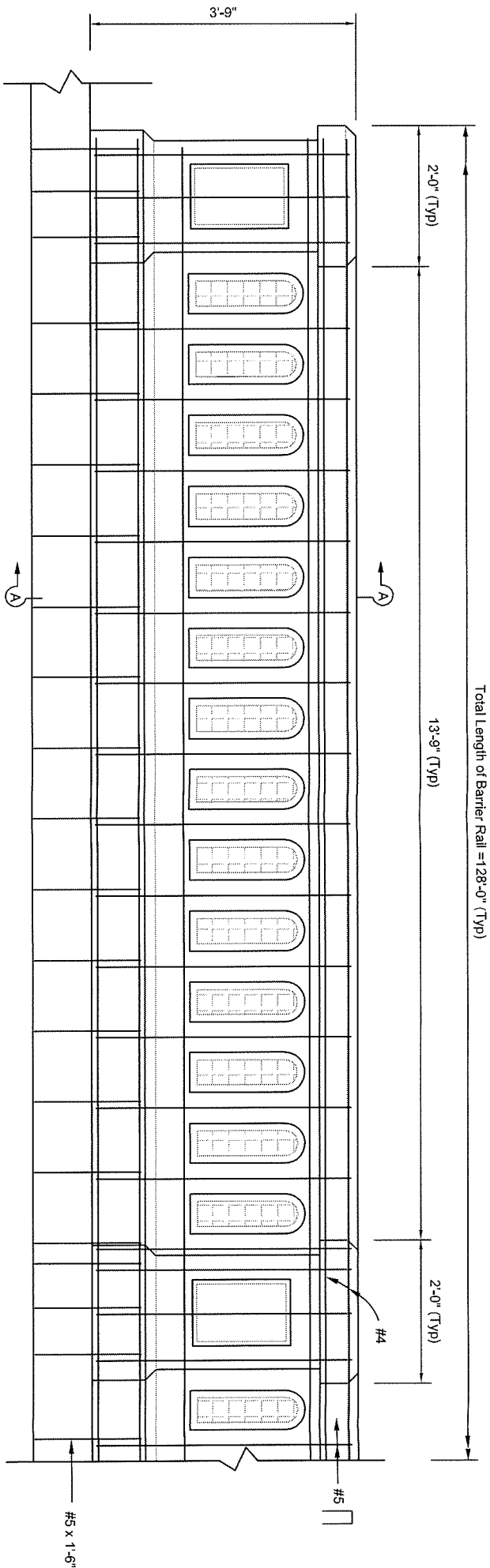
- Notes:
- For Complete Right of Way Information, See Maps in City Office.
 - See Typical Sections, Profiles, Construction Details, and Quantities Sheets for Additional Information.

The north east curb return near the existing State Street Bridge is proposed to be constructed as part of the 00 Block State Street Plans by Penfield & Smith, dated July 20, 2004. The linework shown for the configuration of the proposed curb was provided to Bengal Engineering in Sep. 2007.



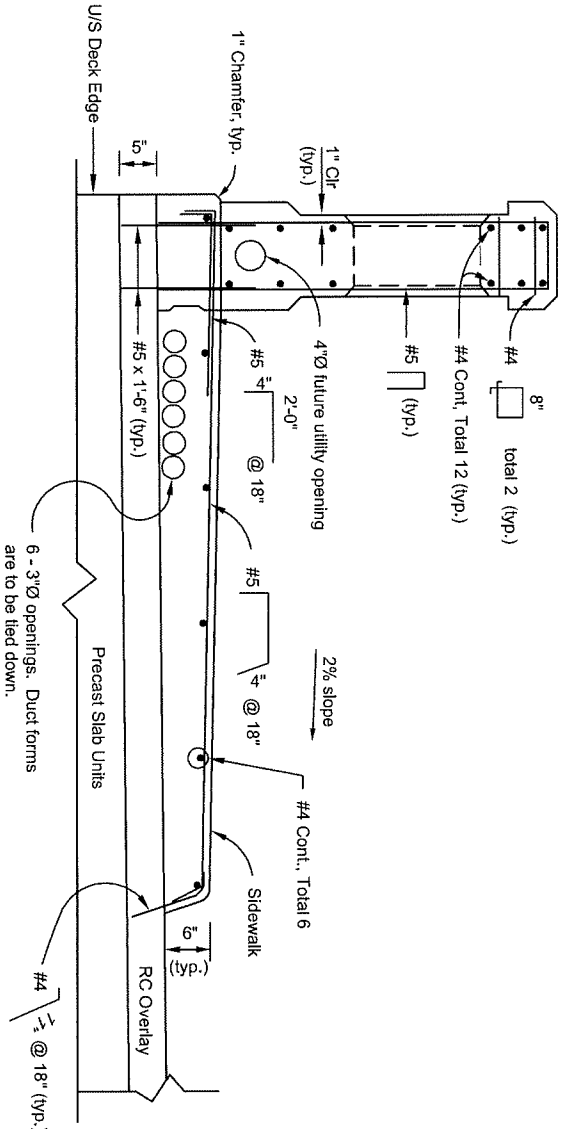
PROGRESS PRINT: October 4, 2012

DESIGN	SO	BENGAL ENGINEERING	Cabrillo Boulevard Bridge (Replacement)	PROPOSED	CITY OF SANTA BARBARA
DRAWN	EPB	250 BIG SUR DRIVE, GOLETA, CA 93117	at Mission Creek	LAYOUT	PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION
CHECKED		(805) 363-0788		Scale: 1" = 20'	
FILED	NO.	Reg. Civil Eng.	Approval Date:	L-1	Approved: _____ Date _____
NO.	DESCRIPTION	DATE	APPROVED		
	REVISIONS				

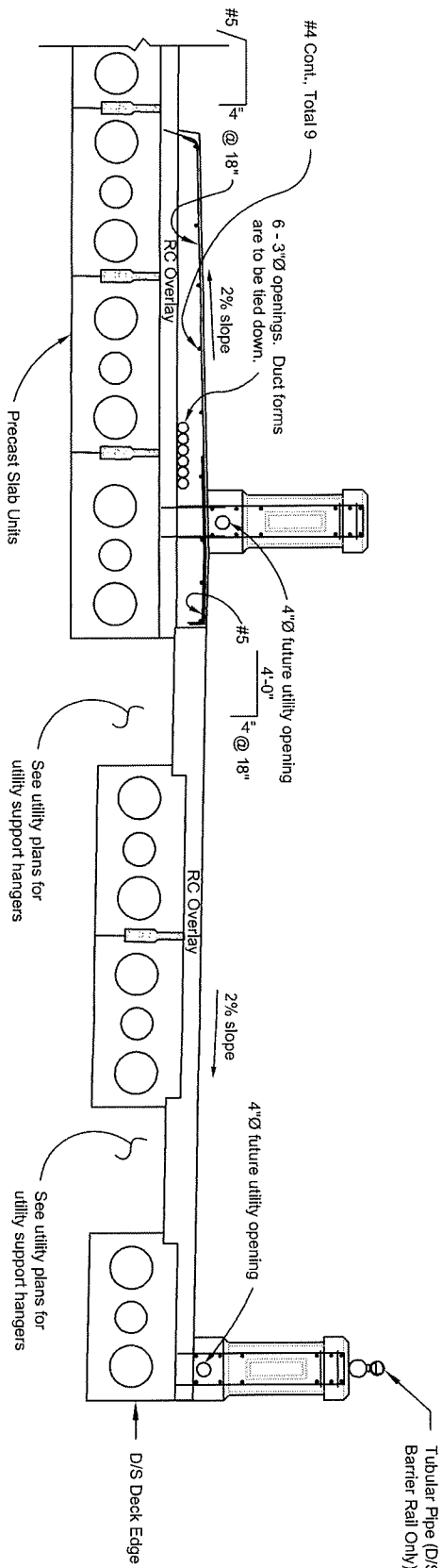
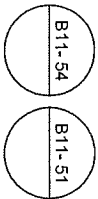


PART BARRIER RAIL ELEVATION
Scale: 1" = 1'-0"

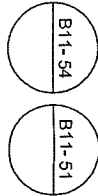
- Notes:
- Utility openings at the sidewalks are to be sealed at ends and extended 8" minimum past end of sidewalk if not used. Duct forms are to be tied down.
 - Utility openings at the barrier rails are to be sealed at ends. Duct forms are to be tied down.



SECTION A-A (U/S BARRIER RAIL)
Scale: 1" = 1'



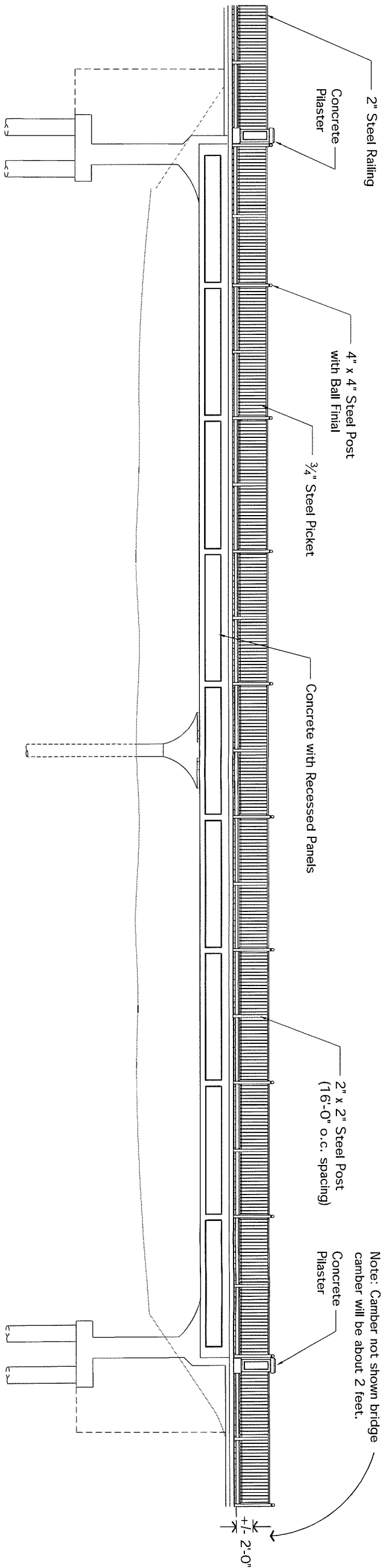
SECTION A-A (D/S BARRIER RAILS)
Scale: 1/2" = 1'



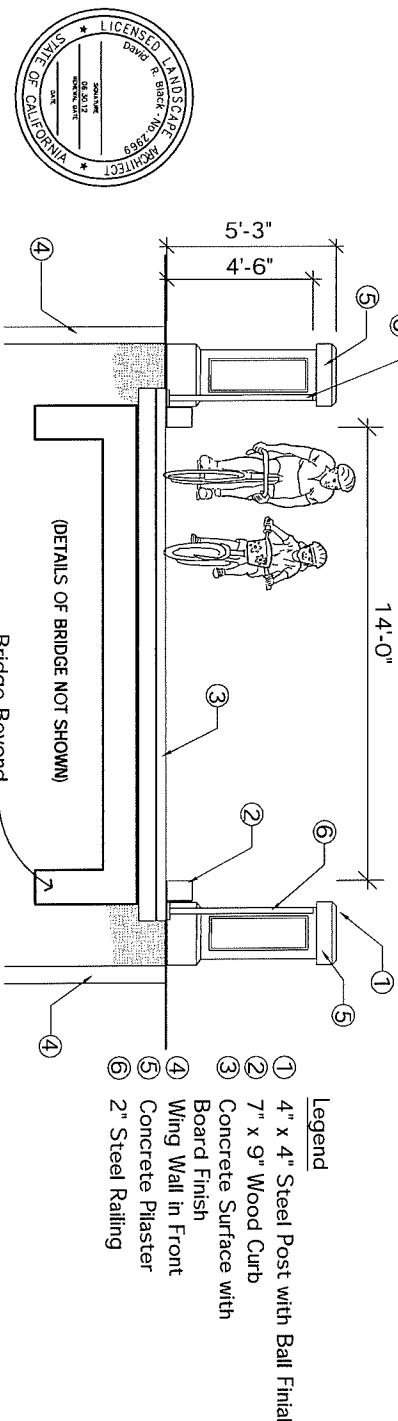
LEGEND

Architectural Opening

DESIGN	12/21	MW	BENGAL ENGINEERING	Cabrillo Boulevard Bridge (Replacement)	MISC. BARRIER RAIL DETAILS	CITY OF SANTA BARBARA	CITY PROJ. No. 7661
DRAWN		RT	250 BIG SUB DRIVE, GOLETA, CA 93117	at Mission Creek		PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION	FA No. BRLS-5007(034)
CHECKED		SI	(805) 563-0788		APPROVED		Sht 6 of 11
F.D.BK. NO.							
NO.							
DESCRIPTION	DATE	APPROVED	PAGE	Reg. Civil Eng.	Approval Date:	Approved:	DWG. NO. C-14200
REVISIONS			ATLS			City Engineer	

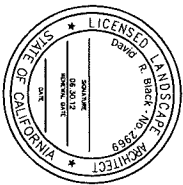


PROPOSED BEACHWAY - ELEVATION

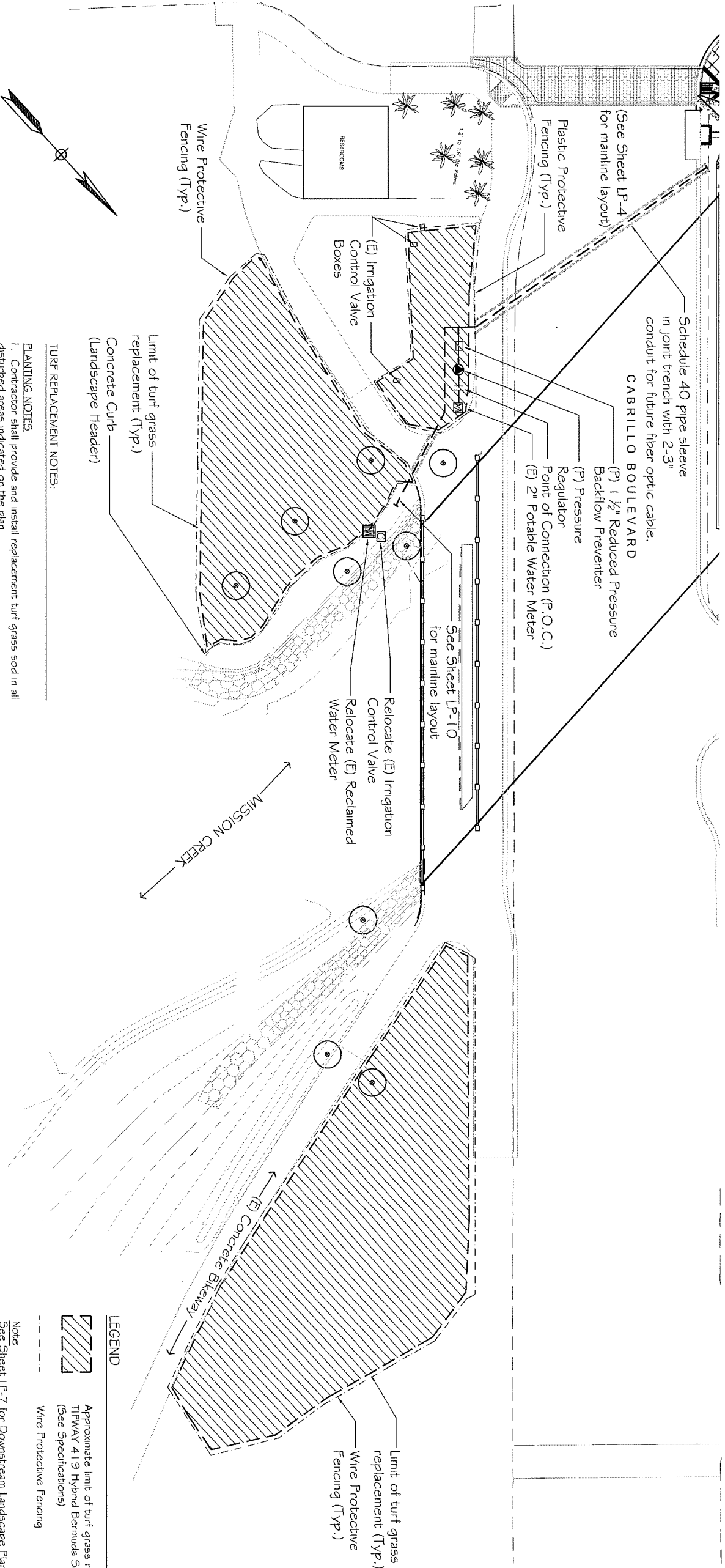


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LAPPROVED ARCHITECT
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e-mail: drblack@drblackandassociates.com



DESIGN	DB	BENGAL ENGINEERING	Cabrillo Boulevard Bridge (Replacement)	Proposed Beachway	CITY OF SANTA BARBARA	CITY PROJ. No. 7661
DRAWN	NJ	250 BIG SUR DRIVE, GOLETA, CA 93117	at Mission Creek	Elevation	PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION	FA No. BRLS-5007(034)
CHECKED	DB	(805) 563-0788		AS SHOWN		SHT. 7 OF 11 SHTS.
PLD. BY	NO.			LP-0		
DATE	APPROVED	Project Eng. _____ Date _____		Approved: _____ Date _____	City Engineer _____	DWG. NO. C-1-4200
REVISIONS						



Turf Replacement Notes:

- Planting Notes:
- Contractor shall provide and install replacement turf grass sod in all disturbed areas indicated on the plan.
 - Replacement turf grass sod shall be Tiway 419 Hybrid Bermuda.
 - The limits of replacement sod indicated on the plans are approximate. In the event that additional disturbed areas are identified during the construction process, the Contractor shall provide and install replacement sod in those areas as well.
 - Refer to specifications for replacement sod installation.
 - After sod installation, the Contractor shall provide and install protective wire fencing around all new sod areas. The protective fencing shall remain in place for a minimum of 60 days or unless directed otherwise by the Engineer.

Irrigation System Notes:

- Contractor shall verify the location of all existing on-site irrigation equipment prior to bidding. Verify existing irrigation system coverage and operation with the Engineer.
- Contractor shall be responsible for relocating all existing irrigation equipment directly impacted by proposed project grading and tree relocation to include reclaimed water irrigation water meter, remote control valves, control wire, irrigation heads, and pipe. Verify final location of all relocated equipment with the Engineer. In the event that irrigation equipment needs to be replaced, the Contractor shall provide and install new equipment at the direction of the Engineer.
- Contractor shall be responsible for making any revisions necessary to the existing irrigation system to accommodate project site changes to pavement and turf grass areas. Contractor shall provide shop drawings designating such changes for review and approval by the Engineer prior to construction.
- Contractor shall be responsible for insuring 100% coverage of all new and existing turf grass areas, to include those areas designated for turf grass replacement.

Legend

- Approximate limit of turf grass replacement. Tiway 419 Hybrid Bermuda Sod (See Specifications)
- Wire Protective Fencing

Irrigation Legend

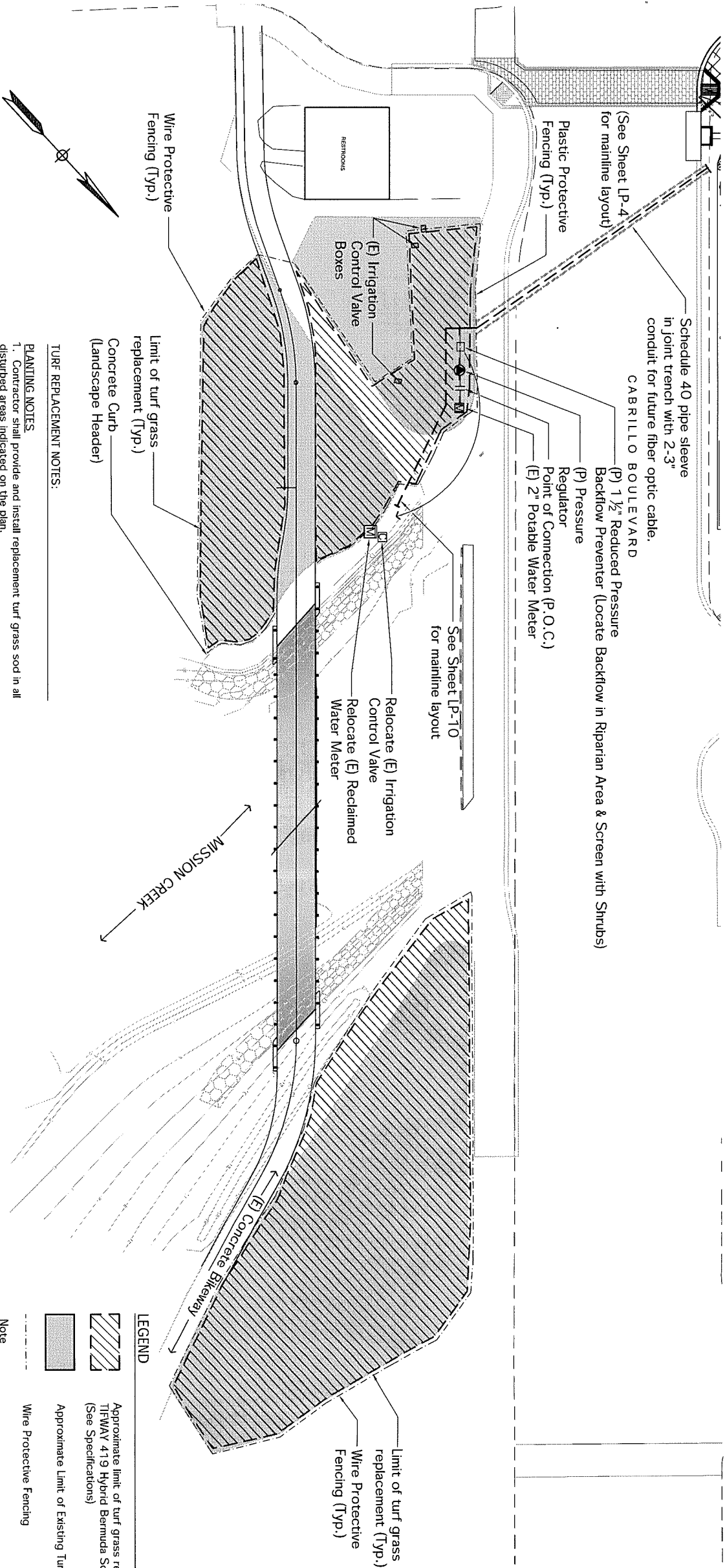
Symbol	Description	Radius	GRM
	(E) 2" Potable Water Meter		
	Point of connection (P.O.C.) as shown on Sheet LP-6		
	Pressure regulator: Honeywell-Bauchmann (1 1/2") with 0-100 psi gauge. Install on Backflow Preventer		
	FEBCO 825V 1 1/2" Reduced Pressure Backflow Preventer		
	Install in expanded metal backflow enclosure: Strongbox model BC-45CR. Color: Green		
	Install per manufacturers recommendations.		
	Irrigation Mainline: PVC Schedule 40 pressure mainline in Schedule 40 sleeve under pavement with 18" minimum cover		
	Pipe Sleeve: Schedule 40		
	Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeve materials. Extend sleeves 18 inches beyond edges of paving or construction.		



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NO.	3-06-11	DESIGN	DB	BENGAL ENGINEERING		Cabrillo Boulevard Bridge (Replacement) at Mission Creek	Turf Replacement Plan SCALE: 1"=20'	CITY OF SANTA BARBARA PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION	CITY PROJ. No. 7661 FA No. BRS-5007(034)
		DRAWN	NJ						
		CHECKED	DB						
		F.D.R.C.N.O.							
DESCRIPTION		DATE	APPROVED	Project Eng. _____ Date: _____		Original Scale Is in inches	0 1 2 3	APPROVED	LP-6
REVISIONS		ATLAS						Approved: _____ Date: _____	DWG. NO. C-1-4200



Turf Replacement Notes:

- PLANTING NOTES:
1. Contractor shall provide and install replacement turf grass sod in all disturbed areas indicated on the plan.
 2. Replacement turf grass sod shall be Tiway 419 Hybrid Bermuda.
 3. The limits of replacement sod indicated on the Plans are approximate. In the event that additional disturbed areas are identified during the construction process, the Contractor shall provide and install replacement sod in those areas as well.
 4. Refer to specifications for replacement sod installation.
 5. After sod installation, the Contractor shall provide and install protective wire fencing around all new sod areas. The protective fencing shall remain in place for a minimum of 60 days or unless directed otherwise by the Engineer.

Irrigation System Notes:

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2. Contractor shall be responsible for relocating all existing irrigation equipment directly impacted by proposed project grading and tree relocation to include reclaimed water irrigation water meter, remote control valves, control wire, irrigation heads, and pipe. Verify final location of all relocated equipment with the Engineer. In the event that irrigation equipment needs to be replaced, the Contractor shall provide and install new equipment at the direction of the Engineer.

3. Contractor shall be responsible for making any revisions necessary to the existing irrigation system to accommodate project site changes to pavement and turf grass areas. Contractor shall provide shop drawings designating such changes for review and approval by the Engineer prior to construction.
4. Contractor shall be responsible for insuring 100% coverage of all new and existing turf grass areas, to include those areas designated for turf grass replacement.

LEGEND

Approximate limit of turf grass replacement, Tiway 419 Hybrid Bermuda Sod (See Specifications)

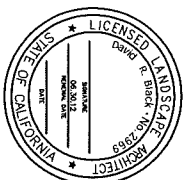
Approximate Limit of Existing Turf

Wire Protective Fencing

Note
See Sheet LP-7 for Downstream Landscape Plan

IRRIGATION LEGEND

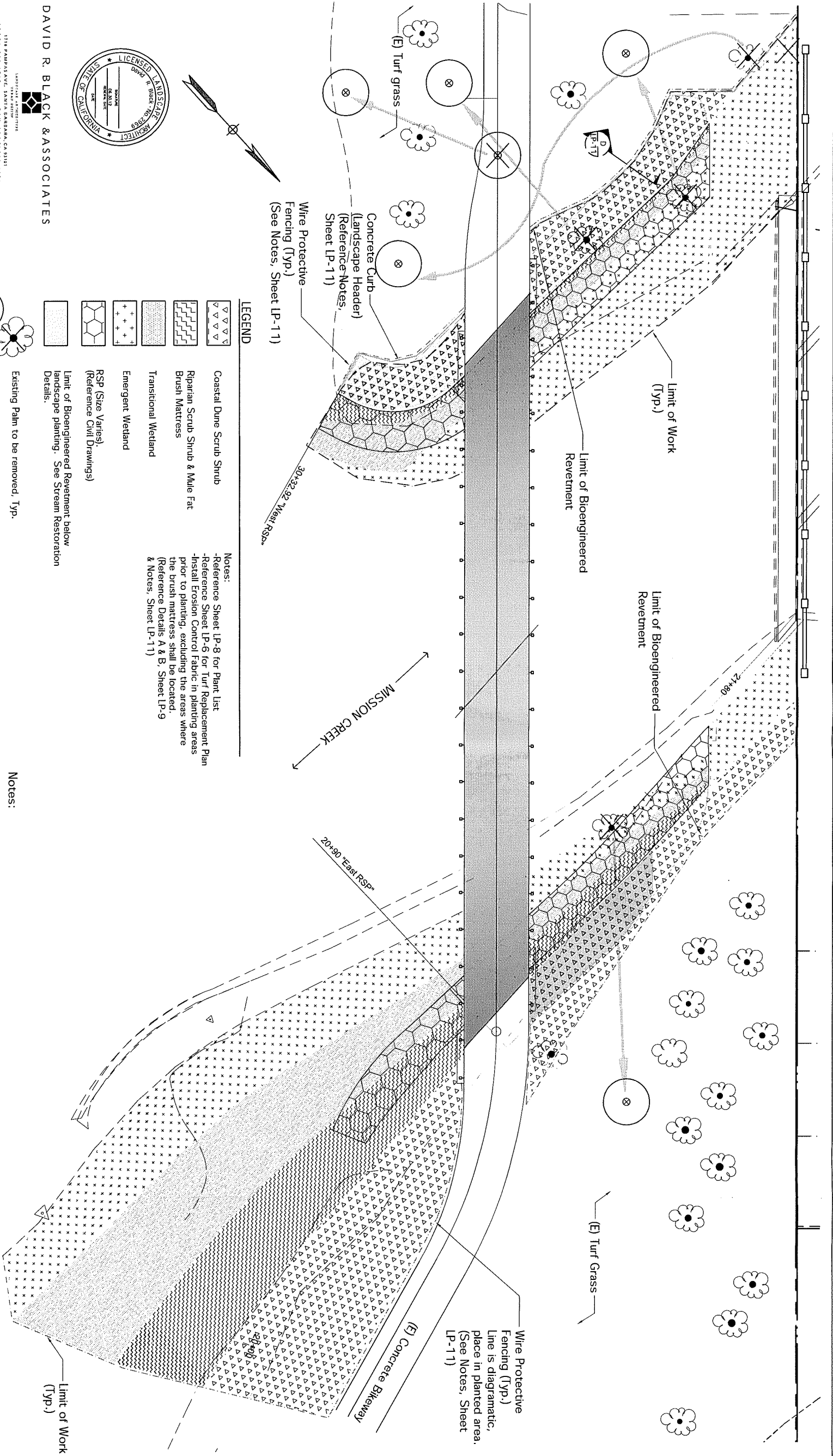
SYMBOL	DESCRIPTION	RADIUS	GPM
	(E) 2" Potable Water Meter		
	Point of connection (P.O.C.) as shown on Sheet LP-6		
	Pressure regulator, Honeywell-Brachmann (1 1/2") with 0-100 psi gauge. Install on Backflow Preventer		
	FEEBCO 825V 1 1/2" Reduced Pressure Backflow Preventer		
	Install in expanded metal backflow enclosure: Strongbox model BC-45CR, Color: Green		
	Install per manufacturers recommendations. Irrigation Mainline: PVC Schedule 40 pressure mainline		
	In Schedule 40 sleeve under pavement with 18" minimum cover		
	Pipe Sleeve, Schedule 40		
	Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving materials.		
	Extend sleeves 18 inches beyond edges of paving or construction.		



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DESIGN NO.	3-20-11	DESIGN DB	DB	BENGAL ENGINEERING			Cabrillo Boulevard Bridge (Replacement) at Mission Creek	Proposed Turf Replacement Plan SCALE: 1"=20' LP-6	CITY OF SANTA BARBARA PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION	CITY PROJ. No. 7661 FA No. BRLS-8007(034) SHT. 9 OF 11 SHTS.
DRAWN BY	8-21-12	CHECKED BY	DB	250 BIG SUR DRIVE, GOLETA, CA 93117 (805) 565-0788						
DATE	9-18-12	DATE	APPROVED	Project Eng. _____ Date: _____						
REVISIONS		DATE	APPROVED	ATLAS _____						



Wire Protective Fencing (Typ.) (See Notes, Sheet LP-11)

Concrete Curb (Landscape Header) (Reference Notes, Sheet LP-11)

(E) Turf grass

Limit of Work (Typ.)

Limit of Bioengineered Revetment

Limit of Bioengineered Revetment

(E) Turf Grass

Wire Protective Fencing (Typ.) Line is diagrammatic, place in planted area. (See Notes, Sheet LP-11)

(E) Concrete Bikeway

MISSION CREEK

20'x90' East Rsp.

30'x32' West Rsp.

LEGEND

Coastal Dune Scrub Shrub

Riparian Scrub Shrub & Mule Fat

Brush Mattress

Transitional Wetland

Emergent Wetland

RSP (Size Varies) (Reference Civil Drawings)

Limit of Bioengineered Revetment below landscape planting. See Stream Restoration Details.

Existing Palm to be removed, Typ.

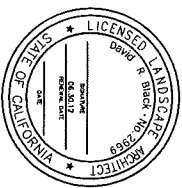
New Palm with 20' BTH match species with species that shall be removed on site. (Total: 4)

Proposed Replacement Relocation

Notes:
-Reference Sheet LP-8 for Plant List
-Reference Sheet LP-6 for Turf Replacement Plan
-Install Erosion Control Fabric in planting areas prior to planting, excluding the areas where the brush mattress shall be located.
(Reference Details A & B, Sheet LP-9 & Notes, Sheet LP-11)

Notes:

1. See "Grading Plan Stream Restoration", Sheet G-1, and "Stream Restoration Key Layout Line Geometry, Sheet SR-GED1" for Layout Information.



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DESIGN	DB	BENGAL ENGINEERING	CITY OF SANTA BARBARA	CITY PROJ. No. 7661
DRAWN	NJ	250 BIG SUR DRIVE, GOLETA, CA 93117	PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION	FA No. BRLS-5007(034)
CHECKED	DB	(805) 563-0788	Proposed Downstream Planting Plan	SHT 11OF11SHTS
PUB. BK. NO.			SCALE: 1"=10'	DWG. NO. C-1-4200
NO.			LP-7	
DESCRIPTION	DATE	APPROVED	Approved: _____	
REVISIONS			City Engineer	